

REMARKS

The above-captioned patent application has been carefully reviewed in light of the non-final Office Action to which this Amendment is responsive. Claims 1, 4-9 and 13 have been amended in an effort to further clarify and to distinctly point out that which is regarded as the present invention. Claims 4 and 13-15 have been canceled. In addition, the specification has also been amended to attend to various typographical and formatting errata. To that end, it is believed that no new matter has been added to the above-captioned application and proper support for all changes is provided within the specification, the drawings and/or the original claims as filed herein.

The Examiner has rejected Claims 1 and 9 under 35 USC §112, first paragraph for failing to comply with the written description requirement. In addition, the specification has also been objected to by the Examiner. Reconsideration is respectfully requested based on the claims, as amended herein, and the following discussion.

Applicants would like to gratefully acknowledge the interview granted by Examiner Gail Kaplan Verbitsky to Applicants' representative, Peter Bilinski, on June 23, 2005 as well as the telephonic interviews that were granted on July 14, 2005 and August 4, 2005. The subject matter of those interviews are incorporated into the text of this response.

Prior to a discussion of the rejections that have been made in the outstanding Office Action, Applicants would again like to briefly summarize the novel contributions made herein by the present invention. To that end, Applicants have developed a thermometry apparatus used for measuring the body temperature of patients. The herein claimed apparatus requires the inclusion of an elongate temperature probe, as well as an isolation chamber that receives the elongate temperature probe and as such forms a probe well. The elongate temperature probe includes at least one temperature responsive element. The probe is inserted into the isolation chamber, the chamber having a receiving cavity that is sized for receiving the elongate temperature probe, wherein each of the probe and the isolation chamber

is further fitted within an appropriately formed closed cavity of the apparatus housing. That is to say, the isolation chamber is also an elongate member that is selectively insertable or releasable into and out of the formed closed cavity of the apparatus housing, the latter being sized to receive each of the isolation chamber and contained temperature probe. Such apparatuses are acknowledged to this point by Applicant, for example, by US Patent 4,008,614 and to Knieriem et al, also cited and applied by the Examiner. Knieriem et al., recites a thermometry apparatus corresponding to this form of design that includes each of the isolation chamber or probe well, elongate probe and housing components. To that end, the inclusion of an isolation chamber, an elongate probe and a housing that receives each of the above in a releasable manner is wholly acknowledged as known by Applicants. These components are required as part of the present invention and it is their representative designs that form the framework for the problem and solution of the present invention.

In fact, the isolation chamber is an essential component, as acknowledged in each of the '614 and Knieriem references, in order to provide a seat for the probe when the probe is not in use. The isolation chamber provides a receiving cavity for housing the probe while the chamber itself provides a fluid tight seal with respect to the interior of the thermometry housing. The housing interior includes electrical components and circuitry that could be damaged if bodily fluids or the like were to enter the confines of the housing. The probe well (isolation chamber) therefore provides a seal or buffer from such fluids contaminating the apparatus.

Due to the separability of the three components herein described, it could produce disastrous results to the apparatus if an elongate thermometry probe, as described, were to be directly placed in the cavity of the apparatus housing following testing thereof without an isolation chamber being located in the cavity beforehand. It is the intent that the probe and the isolation chamber be removed from the housing and cleaned prior to re-use thereof. By making the isolation chamber and the temperature probe each separably removable from the chamber housing, this cleaning can be best effectuated. There is a present need, however, unaddressed by

any of the prior art, including the '614 and Knieriem patents, to prevent the user from not first placing the isolation chamber into the chamber housing prior to inserting the temperature probe. The present invention is aimed to solve the above stated problem.

The above-stated problem is solved herein by the inclusion of two switch assemblies. A first switch assembly is provided within the housing such that insertion of the isolation chamber into the elongated cavity is required to enable same. According to an embodiment of the present invention, the first switch assembly is provided adjacent to the bottom of the housing cavity within a receiving structure, such as a tubular shroud assembly, having an opening that is sized to receive one end of the isolation chamber. Passage of the end of the isolation chamber into the shroud assembly a predetermined distance causes engagement with an arm of the first switch assembly that is attached to the shroud assembly, thereby enabling the first switch assembly.

A second switch assembly, also provided within the assembly housing, is enabled when the elongate temperature probe is removed from the isolation chamber. According to one example, the second switch assembly is optically based and includes an emitter/detector pair that is arranged with respect to light transmissive windows provided in opposing walls of the isolation chamber. When a elongate probe is present in the isolation chamber, the second switch assembly is not yet enabled, since the detector is blocked by the probe. Removal of the probe permits light emitted by the emitter to reach the detector and therefore enables the second switch assembly.

As a result of the above invention, if a user attempts to place an elongate probe directly into the cavity of the assembly housing without an isolation chamber first being present therein, the user will not be permitted to operate the thermometry apparatus since the first and second switch assemblies will not be enabled. That is, the actuating arm of the first switch assembly will not have pivoted because the end of the isolation chamber would not have been inserted a predetermined distance into the shroud assembly disposed within the housing cavity, the shroud assembly being

attached to the first switch assembly. Therefore, the action of the second optical switch assembly, taken alone as the probe passes into and out of the receiving cavity of the housing, would be ineffectual since both the switch assemblies would not be enabled. Therefore, the device would not be powered until the user realizes that the isolation chamber must first be inserted into the chamber housing before inserting the probe in order to permit temperature measurements of a patient to take place using the apparatus.

The prior art of record in the present application does not provide an assembly having two separately integrated switch assemblies, as described above, in order to solve the above-stated problem. For example, Applicant herein acknowledges that Babkes '789 provides a temperature measuring apparatus that includes a housing that further includes a removable module. Furthermore, the removable module includes a receptacle that removably receives a probe. Babkes, however, is significantly and structurally different than the claimed invention of Applicants. That is, the housing of the present invention includes an elongated cavity that is sized to releasably receive each of the isolation chamber (probe well) and the temperature probe. Babkes, on the other hand, includes a cavity in the module for receiving the probe, but does not also permit the entry of an isolation chamber into the same cavity. It has been posited that the detachment of the temperature module (which includes the isolation chamber) from the calculating portion of the housing could be read upon under Claims 1 and 9. Applicants disagree. The isolation chamber itself is separately detachable and engaged within a cavity of the housing. A cavity is inferred to define an enclosed area and not a slot, as shown in Babkes. Babkes does not describe a separable isolation chamber, but rather a portion of a housing is removed, this portion including a non-removable isolation chamber.

In any event, Applicants have amended Claims 1 and 9 to recite the subject matter of Claims 4 and 13-15, now canceled, related to a shroud assembly within the opening of the housing into which the isolation chamber is inserted, the shroud

assembly including an opening that permits the passage of the isolation chamber and in which insertion a predetermined distance engages the first switch assembly to which the shroud assembly is attached.

Knieriem et al (U.S. Patent No. 6,827,488B2) describes the application of an isolation chamber for use with a thermometry apparatus, as acknowledged above by Applicants. To that end, this reference is much more relevant structurally as this reference provides for a releasable isolation chamber, an elongate probe that can be fitted into the isolation chamber and in which each of the isolation chamber and the probe are releasable inserted into an elongate cavity of the housing wherein the isolation chamber provides a fluid tight seal relative to the components inside of the apparatus housing. As noted above, however, the '488 patent describes only a single switch assembly that is used to detect the presence of a temperature probe within the apparatus housing.

Therefore, the Knieriem invention could operate successfully without an isolation chamber by inserting a thermometry probe into the elongate housing cavity and then removing the probe for measuring a patient's temperature which would power the apparatus. Subsequently, the probe including any contamination from the patient would be returned to the housing cavity, the very problem Applicants are attempting to prevent by way of the present invention in which the user would be aware of the presence of an isolation chamber in the cavity when the probe is removed therefrom, wherein the isolation chamber provides a fluid tight seal such that the probe, even if contaminated, could be returned to the isolation chamber following a temperature measurement. Therefore, Knieriem et al. is not structurally equipped to solve Applicants' problem. This reference fails to include a first switch assembly that is enabled when an isolation chamber is placed within the housing cavity and a second switch assembly that is enabled when a probe is removed from an isolation chamber disposed within the housing cavity wherein the thermometry apparatus is powered when each of the first and the second switch assembly is enabled, according to Claims 1 and 9.

Applicants have herein further amended Claims 1 and 9 in response to the outstanding Section 112 rejections to remove the term "only" with regard to the operation of the two switch assemblies. Applicants have also amended these claims to more fully describe the structural features noted above with regard to the isolation chamber and the probe vis a vis the housing opening and the shroud assembly. Support is found repletely in the present application, see paragraphs 0029, 0030, 0031 and 0032 and Figs. 2-5 of the present specification. It is believed that no new matter has been added. It is believed the above changes now cure the Section 112 rejections. Reconsideration is respectfully requested. Applicants have also amended Claims 5-8 and 13 to comport to the changes of Claim 1, as amended. It is believed the above changes also cure the specification objections. Withdrawal is respectfully requested. New Claims 16 and 17 have also been added relating to specifics of the second switch assembly as shown, for example, in Figs. 3-5.

Applicants have also amended the specification to correct numerous typographical and formatting errata. This errata was not previously discovered by Applicants until notification by way of the outstanding Office Action. It is believed support is found in the drawings and in the specification as a whole for any supplemental material for conformance in accordance with Section 112 and that no new matter has been added to this application.

In summary, it is believed that the above-captioned patent application is now in an allowable condition and such allowance is earnestly solicited.

Should the Examiner wishes to expedite disposition of the above-captioned patent application, she is invited to contact Applicants representative at the telephone number below.

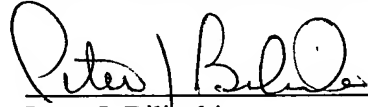
Serial No.: 10/689,272
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Reply to Office Action of June 14, 2005

The Director is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-0289.

Respectfully submitted,

WALL MARJAMA & BILINSKI LLP

By:

A handwritten signature in black ink, appearing to read "Peter J. Bilinski", written over a horizontal line.

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